

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1-14. (Cancelled).

15. (Original) A process for producing a two-phase electrophoretic medium, this process comprising:

providing a liquid medium comprising a film-forming material;

dispersing in the liquid medium a plurality of droplets, each of which comprises a suspending fluid and at least one particle disposed within the suspending fluid and capable of moving through the fluid upon application of an electric field thereby forming a droplet-containing liquid medium; and

subjecting the droplet-containing liquid medium to conditions effective to cause the film-forming material therein to form a film, and thereby producing a two-phase electrophoretic medium in which the film-forming material forms a continuous phase surrounding and encapsulating the droplets, which form the discontinuous phase of the electrophoretic medium, the discontinuous phase comprising at least about 40 per cent by volume of the electrophoretic medium.

16. (Original) A process according to claim 15 wherein said film-forming material comprises gelatin.

17. (Original) A process according to claim 16 wherein gelatin comprises about 5 percent to about 15 percent by weight of said electrophoretic medium.

18. (Original) A process according to claim 16 wherein said suspending fluid is selected from organic solvents, halogenated solvents, halogenated polymers, silicone oils, linear hydrocarbons, branched hydrocarbons and mixtures thereof.

19. (Currently amended) A [suspending fluid]process according to claim 18 wherein said halogenated polymer comprises poly(chlorotrifluoroethylene).

20. (Currently amended) A [two-phase electrophoretic medium]process according to claim 15 wherein said droplets contain two types of particles comprising titania and carbon black respectively.

21. (Original) A process according to claim 15 wherein said dispersion of said plurality of droplets in the liquid medium is effected by any one or more of variable speed mixing, sonication, shearing and colloid milling.

22. (Original) A process according to claim 15 wherein said conditions effective to cause the film-forming material therein to form a film comprise any one or more of radiation-curing, heating, cooling, drying, polymerization, cross-linking, sol-gel formation, and pressure-curing.

23. (Currently amended) A process according to claim 15 wherein, prior to being exposed to said conditions effective to cause said film formation, said droplet-containing liquid medium is spread as a layer having a thickness of at least about 50 μm onto a substrate.

24. (Currently amended) A process according to claim 23 wherein prior to being exposed to said conditions effective to cause said film formation, said droplet-containing liquid medium is spread as a layer having a thickness of about 50 μm to about 200 μm onto a substrate.

25. (Currently amended) A process according to claim 24 wherein prior to being exposed to said conditions effective to cause said film formation, said droplet-containing liquid medium is spread as a layer having a thickness of about 100 μm onto a substrate.

26. (Currently amended) A process according to claim 15 wherein said droplets [comprises]have an average initial size of about 25 percent to about 400 percent of the thickness of the final film.

27. (Original) A process according to claim 15 wherein said discontinuous phase comprises about 40 to about 95 percent by volume of the electrophoretic medium.

28. (Currently amended) A process according to claim 27 wherein said discontinuous phase comprises about 50 to about 80 percent by volume of the electrophoretic medium.

29. (Currently amended) A process according to claim 28 wherein said discontinuous phase comprises about 60 to about 70 percent by volume of the electrophoretic medium.